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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/774,205	02/06/2004	Holger Bengs	08196-00017-US	6983

23416 7590 09/08/2006

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EXAMINER	
TRAN, SUSAN T	

ART UNIT	PAPER NUMBER
1615	

DATE MAILED: 09/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/774,205	BENGS ET AL.	
	Examiner	Art Unit	
	Susan T. Tran	1615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-13 and 26-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-13,26-35 and 38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☒ Claim(s) *1-13 and 26-38* are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13, 26-35 and 38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-5 of U.S. Patent No. 6,703,048 ('048) in view of US 6,723,429 ('429). USPN '048 claimed a process for preparing spherical microparticles consists essentially of wholly or partly of a water-insoluble linear 1,4-α-D-polyglucan. The process consists essentially of dissolving the water-insoluble linear 1,4-α-D-polyglucan in a solvent, introducing the solution into a precipitant, cooling the mixture resulting therefrom, and removing the microparticles formed and said solvent is dimethyl sulfoxide (claims 1 and 3). Mixing and cooling temperatures are found in claim 2. Precipitant is water or aqueous medium

is found in claim 4. Solution is prepared in the presence of polymers and/or active substances (claim 5). USPN '048 does not recite the microparticles size. USPN '429 claimed a spherical microparticle having average diameter in the range of 100 nm to 10 μm, and dispersity density in the range from 1-10 (claims 19 and 20). Thus, it would have been obvious to one of ordinary skill in the art to combine the teaching of USPN '429 with USPN '048 to obtain the claimed invention, because the two patents teach using the same method, the same materials, and the same parameter to obtain a similar product, namely spherical microparticles consisting wholly or partly of water-insoluble linear 1,4-α-D-polyglucan.

Claims 1-13, 26-35 and 38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 4, 6-9, 11-17 and 19-26 of U.S. Patent No. 6,723,429 ('429). Although the conflicting claims are not identical, they are not patentably distinct from each other because USPN '429 claimed a method for preparing spherical microparticles comprising dissolving at least one water-insoluble polysaccharide in a solvent or solvent mixture to form a solution, introducing the solution into a precipitant or precipitant mixture to produce a polysaccharide-precipitant mixture, cooling the polysaccharide-precipitant mixture, to produce microparticles, and removing the microparticles. Water-insoluble linear 1,4-α-D-polyglucan is found in claims 8, 9, 14 and 16. Dimethyl sulfoxide as a solvent is found in claim 7. Mixing and cooling temperatures are found in claim 4. Precipitant is water or aqueous medium is found in claim 6. Spherical microparticles having the claimed density and average diameter are found in claims 19 and 20. Thus, it would have been

obvious to one of ordinary skill in the art to, by routine experimentation optimize the teachings of USPN '429 to obtain the claimed invention, because USPN '429 teaches using similar method, similar materials, and similar parameter to obtain a similar product, namely spherical microparticles made of water-insoluble linear 1,4-α-D-polyglucan having average diameter from 100 nm to 10 μm.

Claims 1-13, 26-35 and 38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 11 and 13-16 of U.S. Patent No. 6,593,470 ('470), in view of USPN '429. Although the conflicting claims are not identical, they are not patentably distinct from each other because USPN '470 claimed a method for preparing spherical particles comprising dissolving at least one water-insoluble linear polysaccharide in a solvent or solvent mixture to form a solution, introducing the solution into a precipitant or precipitant mixture to produce a polysaccharide-precipitant mixture, cooling the polysaccharide-precipitant mixture, to produce microparticles, and removing the microparticles. Water-insoluble linear 1,4-α-D-polyglucan is found in claims 2, 7 and 16. Dimethyl sulfoxide as a solvent is found in claim 14. Mixing and cooling temperatures are found in claim 11. Precipitant is water or aqueous medium is found in claim 13. Spherical microparticles having the claimed density and average diameter are found in claims 19 and 20. This patent does not teach the particles size. USPN '429 claimed a spherical microparticle having average diameter in the range of 100 nm to 10 μm, and dispersity density in the range from 1-10 (claims 19 and 20). Thus, it would have been obvious to one of ordinary skill in the art to combine the teaching of USPN '429 with USPN '470 to obtain the claimed invention,

because the two patents teach using the same method, the same materials, and the same parameter to obtain a similar product, namely spherical microparticles containing water-insoluble linear 1,4-α-D-polyglucan.

Claims 1-13, 26-35 and 38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-32 of U.S. Patent No. 6,562,459 ('459) in view of US 6,723,429 ('429). USPN '459 claimed a method for preparing spherical microparticles comprising dissolving at least one water-insoluble polysaccharide in a solvent or solvent mixture, introducing the solution into a precipitant or precipitant mixture to form a polysaccharide-precipitant mixture, cooling the polysaccharide precipitant mixture, and removing the microparticles. Water-insoluble linear 1,4-α-D-polyglucan is found in claims 7, 15 and 16. Dimethyl sulfoxide as a solvent is found in claim 14. Mixing and cooling temperatures are found in claim 11. Precipitant is water or aqueous medium is found in claim 13. USPN '459 does not recite the microparticles size. USPN '429 claimed a spherical microparticle having average diameter in the range of 100 nm to 10 μm, and dispersity density in the range from 1-10 (claims 19 and 20). Thus, it would have been obvious to one of ordinary skill in the art to combine the teaching of USPN '429 with USPN '459 to obtain the claimed invention, because the two patents teach using the same method, the same materials, and the same parameter to obtain a similar product, namely spherical microparticles of water-insoluble linear 1,4-α-D-polyglucan.

Election/Restrictions

This application contains claims directed to the following patentably distinct species: 1) biotechnological process, 2) fermentation process, and 3) biocatalytic process, using a) polysaccharide synthases, b) using starch synthases, c) using glycosyltransferases, d) using α-1,4-glycan transferases, e) using glycogen synthases, f) using amylosucrases, and g) using phosphorylases.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, claims 1 and 2 are generic.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which depend from or otherwise require all the limitations of an allowable generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the

requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

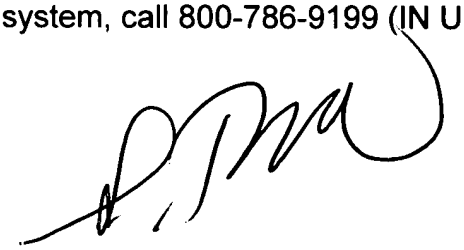
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Susan T. Tran whose telephone number is (571) 272-0606. The examiner can normally be reached on M-F 6:00 am to 4:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Woodward can be reached on (571) 272-8373. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



S. Tran
Patent Examiner
Art Unit 1615